UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/096,936	06/12/1998	TIMOTHY DARLAND	CDR97007	2377

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EXAMINER
LUTHER, WILLIAM A

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 06/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/096,936	Applicant(s) Darland et al.		
	Examiner William Luther	Art Unit 2664		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___*3*___ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Jun 12, 1998* .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-29* is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-29* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    a) ☐ All b) ☐ Some* c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) *in formal*

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _*6*_

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

Telephonic Interview

On April 10, 2002, Michael Chernoff ("counsel") contacted the primary examiner as a result of the primary examiner's prior telephonic efforts to contact counsel. Counsel and the primary examiner discussed that the instant patent application's claims might be subject to restriction under Section 121. Claim groupings discussed included the apparatus claims and the method claims to using that claimed apparatus. Eventually, counsel told the primary examiner that the "means for" claim limitations recited by initially filed claim 3 make that a 'linking claim.' Also, counsel told the primary examiner that because claim 3 links apparatus claims and method claims directed for using that apparatus, the PTO was precluded from restricting the claims by guidelines provided in the Manual of Patent Examining Procedure (M.P.E.P.) See Chapter 800 M.P.E.P., Edition 8, Aug. 2001.

Because the primary examiner has had difficulty in understanding the applicants' claims, and because the applicants and their counsel are assumed to know and understand their own claims (see instant declaration made under Rule 63), and because counsel told the primary examiner that claim 3 is a "linking claim," the primary examiner relies on applicants and applicants' counsel's understanding of their own claims in not restricting the claims under Section 121.

It is recognized that the use of "means for" language in a claim (e.g., claim 3) has the significant effect that the claim is presumed to be interpreted under Section 112 6th paragraph. Should the applicants amend the claims by deleting the "means for" language to avoid

interpretation under Section 112 6th paragraph or for any other reason, such an amendment

would also "unlinked" previously linked claims. Such an amendment might possibly result in a

restriction of the claim groupings already orally telephonically discussed.

Disclosures

It appears that the applicants filed an information disclosure statement (IDS) on

September 2, 1998. The applicants also filed an IDS on April 1, 2002. The April 1st IDS has

been considered. See Attached. However, the Sept. 2nd IDS cannot be found. As a result,

applicants are requested to submit a **copy** of the Sept. 2nd IDS.

Summary

In the prior art ACD-AP combination, new services and enhancement of existing services

are often provided for by more expensive modifications to the ACD. The ISN service provider is

therefore subject to the ACD vendor's development costs and time. However, the instant

application for U.S. Letters patent asserts that the programmable switch and controller

combination provides a cost effective manner for expanding and enhancing services to an existing

system while avoiding the prior art alternative of more expensive modifications to ACD-AP

combination.

The Claims

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and
> distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention.

Considering claim 6, applicants are requested to clarify for the record as to whether the

use of the term "or" is meant to be construed as: 1) exclusive, i.e, meaning a choice between

either one or two alternatives, but not both; or 2) as inclusive, i.e., meaning a choice between

alternatives or a combination of them. Applicants are also requested to clarify how the first

alternative is further limiting in view of the apparent fact that a "programmable switch" has been

claimed already in depending claim 1.

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

3.   Claims 1, 6, 13, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by

Excel Inc.'s prior art (as evidenced by U.S. Pat. No. 5,826,030 ('030) to Herbert.[1])

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[1] '030 incorporates-by-reference the teachings described in U.S. Pat. Appl. No.
08/207,931, U.S. Patent 5,544,163 ('163). See, col. 5 at line 60. The '030 specification, in fact,
includes the '163 specification. Accordingly, claims are rejected in view of '030. For the purpose
of convenience, reference is made to either '030 or '163, although the rejecting reference is '030.

Considering claims 1, 6 (rejected as best understood), 13, and 16-17, the instant patent

applicants describe ". . . programmable switches . . . and the configuration of the programmable

switches . . . manufactured by Excel . . . ." See, e.g., specification pg. 8 at line 29. '163 (assigned

to Excel Inc., Hyannis, Mass.) appears to teach Excel programmable switches including a HOST

functioning as a switch controller coupled to Excel's programmable switch(es). See, e.g., Fig.

1B. Considering claim 17 further, '163 also appears to teach switch controllers in its teaching of

"multiple hosts to control the system . . . ." See, e.g., col. 6, at line 14. The instant patent

applicants are requested to clarify for the record what they believe are the difference(s) between

the instant application for United States letters patent on a programmable switch and any one of

the vendor Excel's programmable switches already patented to Excel (e.g., '163) or otherwise

known the instant patent applicants (Summa Four). See specification at pg. 8.

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims
under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was
commonly owned at the time any inventions covered therein were made absent any evidence to
the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor
and invention dates of each claim that was not commonly owned at the time a later invention was
made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35
U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4, 7-9, 12, 14, 18-20, 23-27, and 29 are rejected under 35 U.S.C. 103(a) as

being unpatentable over the MCI Communications Corp. (MCI) prior art proprietary ISN (as

evidenced by U.S. Pat. No. 6,188,761 ('761) to Dickerman) in view of Excel Inc. prior art

proprietary programmable switches (as evidenced by as '030 to Herbert).

Considering claims 2, 7, and 14, as evidenced by U.S. Pat. No. 6,188,761 ('761) to

Dickerman, MCI prior art proprietary ISN use an ACD, rather than a programmable switch. See

print figure. Moreover, '761 teaches ISN components (e.g., ARUs) coupled to an ACD. See

'761, col. 1 at line 49. '761 does not teach substitution of the combination programmable switch

and controller in place of the combination ACD-AP. However, as discussed above, Excel Inc., as

evidenced by '030, suggests a programmable switch controlled by a HOST storing software

programing for controlling communications between the programmable switch and the controller

using Excel Inc. supported API messages. It would have been within the level of skill of the

ordinary artisan at the time that the instant U.S. application for letters patent was filed (June 12,

1998), to substitute Excel Inc.'s programmable switch and suggested controller HOST in place of

the instant assignee's prior art combination ACD-AP for the benefit of ". . . a universal API that

provides standardized call control processing . . . " rather than using the more expensive

modifications to ACD-AP combinations when service expansion is desired. See '030, col. 2 at

lines 40-44.

Considering claim 3, Excel Inc.'s proprietary system appears to suggest a controller

(HOST) that interfaces with its programmable switch(es) via an applications program interface

(API) analogous to the claimed ". . . programmable switch support means for providing an

interface to said programmable switch . . . ." <u>See</u>, '030, col. 1 at 56-58. In addition, Excel Inc.,

appears to suggest that the HOST controller include software that establishes connections

between ports on its programmable switch(es) analogous to the claimed ". . . call control means

for establishing a connection between two ports on said programmable switch . . . ." <u>See</u>, '030,

col. 2 at 64-66. Excel Inc. does not appear to explicitly teach the claimed ". . . switch controller

[comprising] . . . . service control means for interfacing with said intelligent services network

component . . . ." However, in the MCI system, the ACD-AP combination performs ". . . service

control means for interfacing with said intelligent services network component . . . ." It would be

obvious to the ordinary artisan to use Excel Inc.'s programmable switch and controller

combination as a substitute for the prior art MCI ACD-AP combination for reasons already

stated. Given that substitution, it would have been obvious to store and run the software ". . .

service control means for interfacing with said intelligent services network component . . . " in the

EXCEL taught HOST and not the Excel taught programmable switch because the Excel

programmable switch is a dumb switch and would therefore not support such software

programming. <u>See</u> instant specification at page 8, lines 16-25.

    Considering claim 4, resource management (such as call queuing and call parking)

appears to have also been contemplated by Excel Inc. <u>See</u> '163, col 4. (For example, Excel Inc.

teaches ". . . increasing the maximum switching capacity of the system and providing

redundancy.") It also appears that Excel Inc. has built switches to be controllable by a single

HOST controller for an expandable system and allocating resources for it. In addition, prior art

MCI ISN, as evidenced by '761, also appears to suggest other ". . . resource control means for

allocating resources . . . " such as that programmed into the prior art ACD-AP combination. One

MCI ISN software allocated resource is an "AIN gateway." See '761, col. 3 at lines 61-65.

Considering claims 8, all or most all ISN's implicitly access data base(s) by definition, to

implement their intelligent functions. See one example in '761, col. 3 at line 18.

Considering claim 9, it appears that it would have been within the level of skill of the

ordinary artisan (on June 18, 1998) to implement MCI ISN utilizing NIDS ISN components for

the benefit of ". . . an expeditious way to bring new services onto the network without duplicating

tasks every time a new service is introduced and without having to modify the network protocol

every time a new service is introduced." See '761, col 2, lines 46-50.

Considering claims 12, '761 teaches as follows:

[i]n this example, the BOSS 810 process is responsible for starting, stopping, and
monitoring processes within the AIN gateway 120. At startup, after reading a
configuration file that indicates which processes should be started, the BOSS 810
starts those processes.

See col. 22, paragraph 2. Accordingly, it appears that '761 suggests a kind of configuration and

provisioning system within the instant assignee's ISN.

Considering claims 18, see above.

Considering claim 19, prior art proprietary MCI teachings, as evidenced by '761, appear

to suggest one or more external networks and resources. See '761, col. 3 at lines 61-65. See also

the print figure's "credit card validation system" connected by the "validation gateway" to MCI's proprietary ISN.

Considering claim 20, see above.

Considering claim 23, it appears that applicants are claiming prior art SS7 signals are sent to and from the PSTN, through the programmable switch, by the controller. However, Excel Inc.'s programmable switch is a dumb switch[2] and appears to have been designed to support SS7 signaling communications to and from the HOST controller and the PSTN. More specifically, '030 appears to suggest the steps to be performed between its programmable switch and HOST controller. '761 also teaches the use of the instant assignee's transmission control (TC) messages. See '761, col 12, lines 5-8. In addition, '761 appears to teach means for communicating with an intelligent service network component using transmission control messages. See figures 14-42 and corresponding descriptions.

Considering claim 24, the claimed process appears to be suggested in '030's '163's teachings for allocation of programmable switch transfers.

Considering claim 25-27, the claimed process appears to be suggested after further consideration of '761's Figures 18-42 and corresponding description.

Considering claim 29, see '761, col 12 lines 63 through col 13 line 4, wherein '761 states as follows ". . . [t]he AIN app 804 preferably contains Application Program Interfaces (API) for sending and receiving TCAP messages."

_____

[2] See instant specification at page 8, lines 16-25.

5.   Claims 10, 15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

prior art MCI Communications Corp. (MCI) proprietary ISN (as evidenced by U.S. Pat. No.

6,188,761 ('761) to Dickerman) in view of prior art Excel Inc. proprietary programmable

switches (as evidenced by '030 to Herbert) and Admitted Prior Art (APA).

        Considering claims 10, 15, and 21, as stated above, prior art MCI ISN suggests the claims

using the ACD-AP combination (as opposed to the claimed programmable switch and controller

combination.) However, as also stated above, Excel Inc. suggests using a "dumb" programmable

switch and a HOST controller for certain benefits at least one of which has already been

explained. Further, the applicants appear to have already recognized that prior art teaches ". . . a

simple network management protocol (SNMP), which is an industry standard messaging protocol

for network management . . . ." See instant spec. APA, page 19. It would have been obvious to

one having ordinary skill in the art to program the Excel Inc. HOST controller with industry

standard messaging protocol for the purpose of furthering universal compatibility. See '030.

6.   Claims 5, 11, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the

MCI Communications Corp. (MCI) prior art proprietary ISN (as evidenced by U.S. Pat. No.

6,188,761 ('761) to Dickerman and U.S. Patent No. 5,920,621 ('621) to Gottlieb) in view of

Excel Inc. prior art proprietary programmable switches (as evidenced by '030 to Herbert).

        Considering claims 5, 11, and 22, as stated above, prior art MCI ISN suggests the claims

using the ACD-AP combination (as opposed to the claimed programmable switch and controller

combination.) However, as also stated above, Excel Inc. suggests using a "dumb" programmable

switch and a HOST controller for certain benefits at least one of which has already been

explained. Further, it is well known in the prior art MCI ISN ACD-AP combination to to

provide " . . . means for communicating with a force management system using force management

messages" as evidenced by U.S. Patent No. 5,920,621 ('621) to Gottlieb. See '621, col 2, lines

49-54.

7.   Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over the MCI

Communications Corp. (MCI) prior art proprietary ISN (as evidenced by U.S. Pat. No. 6,188,761

('761) to Dickerman and U.S. Pat. No. 6,108,337 ('337) to Sherman et al.) in view of Excel Inc.

prior art proprietary programmable switches (as evidenced by '030 to Herbert).

        Considering claim 28, to the extent that the specifically recited resource management and

reorigination signals are not already suggested by '761 and '030 for the reasons already stated, it

appears to be suggested by '337. More specifically, '337 appears to suggest various resource

management (RM) system functions in an ISN environment including operations of queuing and

parking calls, depending on available resources. See, e.g., col 20 at lines 6-31.

8.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to William Luther whose telephone number is (703) 308-6609. If attempts to

reach the primary examiner by telephone are unsuccessful, the primary examiner's supervisor,

Wellington chin, can be reached at (703) 305-4366.

        Any response to this action should be mailed to:
        Commissioner of Patents and Trademarks
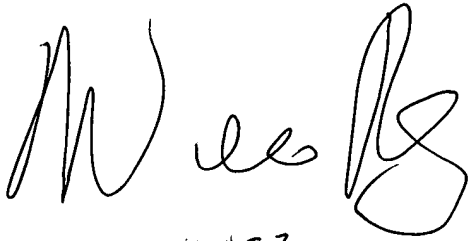   Washington D.C. 20231

or faxed to:
        (703) 872-9314.

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist.)

        Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

William Luther
Primary Examiner
May 6, 2002

6/13/02